

Use-case: Collect reward

Primary actor: Player

Goal in context: To navigate the main character in the game to a square containing a reward item, either regular or bonus

Preconditions: Application must be open, and game must already be started

Trigger: The player decides he/she wants to obtain a reward, either for the purpose of increasing their score, or to further their goal of collecting all regular rewards in order to win the game

Scenario:

1. The player locates a tile on the game board that contains a reward
2. The player, through the use of the WASD or arrow keys, operates the main character and moves it towards the previously located reward
3. The player reaches the tile containing the reward, collecting it and adding the associated amount to the player's score

Exceptions:

1. There are enemies, either moving or stationary, on the path towards the reward; see use case "Avoid enemies"

Priority: High priority

When available: To be implemented directly after the implementation of all necessary classes and objects

Frequency of use: Very frequent

Use-case: Move to end cell

Primary actor: Player

Goal in context: To navigate the main character in the game to the square designated as the end cell

Preconditions: Application must be open, game must be started, and all regular rewards must already be obtained

Trigger: The player decides he/she does not want the main character to remain on the game board to collect further rewards, if any, and wants to win the game by reaching the end cell

Scenario:

1. The player locates the end cell on the game board
2. The player, through the use of the WASD or arrow keys, operates the main character and moves it towards the end cell
3. The player reaches the end cell, winning the game and subsequently displaying the victory screen

Exceptions:

1. There are enemies, either moving or stationary, on the path towards the reward; see use case "Avoid enemies"

Priority: High priority

When available: To be implemented directly after the implementation of all necessary classes and objects

Frequency of use: Very frequent

Use-case: Avoid enemies

Primary actor: Player

Goal in context: To navigate the main character in the game in a manner that does not result in occupying the same tile as an enemy

Preconditions: Application must be open, and game must already be started

Trigger: While navigating to a desirable tile on the game board, the player notices there is at least one enemy in the way

Scenario:

1. The player sees an enemy between the main character and where they want to navigate
2. The player, with the knowledge of how moving and non moving enemies behave, must find an alternate route to the end destination that avoids ending up in the same tile as one of them
3. The player, through the use of the WASD or arrow keys, operates the main character along this alternate route

Exceptions:

1. The player miscalculates their alternate route, and there are still enemies in the way. They must now avoid these new enemies, which results in a new iteration of this use case.

Priority: High priority

When available: To be implemented directly after the implementation of all necessary classes and objects

Frequency of use: Very frequent

Use-case: Open game application

Primary actor: Player

Goal in context: Start the game application

Preconditions: Computer containing the game application must already be started and logged in to, with no other instance of the game application open

Trigger: The player decides they want to start the game

Scenario:

1. The player finds the executable application in the appropriate directory of the computer
2. The player double clicks on the icon, launching the application

Priority: Low priority, will begin by implementing the core functionality before making it an executable file

When available: Last iteration

Frequency of use: Moderate

Use-case: Close game application

Primary actor: Player

Goal in context: End the game application

Preconditions: Game application is already open, and is running in the foreground

Trigger: The player decides they do not want to continue playing

Scenario:

1. The player clicks the "Quit" button

Exceptions:

1. If a game is already in progress, then one must first access the pause menu before pressing the quit button; see use case "Open pause menu"

Priority: Low priority

When available: Last iteration

Frequency of use: Moderate

Use-case: Adjust volume

Primary actor: Player

Goal in context: Change the volume settings within the game application

Preconditions: Game application is already open, and is running in the foreground

Trigger: The player decides they want to adjust the volume

Scenario:

1. The player clicks the "Options" button
2. The player drags the slider in the desired direction with their mouse

Exceptions:

1. If a game is already in progress, then one must first access the pause menu before pressing the options button; see use case "Open pause menu"

Priority: Low priority

When available: Last iteration

Frequency of use: Low

Use-case: Change language

Primary actor: Player

Goal in context: Switch the language settings within the game application

Preconditions: Game application is already open, and is running in the foreground

Trigger: The player decides they want to change the language

Scenario:

1. The player clicks the "Options" button
2. The player clicks the drop down menu, and selects the language they wish to switch to

Exceptions:

1. If a game is already in progress, then one must first access the pause menu before pressing the options button; see use case "Open pause menu"

Priority: Low priority

When available: Last iteration

Frequency of use: Low

Use-case: Open pause menu

Primary actor: Player

Goal in context: To pause the game in progress, adjust options, or quit the game

Preconditions: Game application is already open, and is running in the foreground with a game in progress

Trigger: The player decides they want to pause the game, or to explore other options presented through the pause menu such as options or quitting

Scenario:

1. The player presses the “Esc” key on their keyboard

Priority: Low priority

When available: Last iteration

Frequency of use: Moderate